ArgonCube2x2
Minerva Test Stand at Lab F

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ArgonCube2x2 Electronics and Readout Integration

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Goals

- Short - Get the test stand at Lab F operational
  - Read out
  - Light Injection
- Medium - Verify the installation of the detector and electronics underground
  - Need read out and ability to look at data
  - Need light injection functioning
  - Once electronics are installed some of them are difficult/impossible to reach
- Long - Underground operations
  - DAQ
    - Tracking for ArgonCubed
      - Combined DAQ? Artdaq or minervadaq?
      - Independent DAQs with event matching?
    - Timing
  - Data Analysis

Lab F

- Computer - mnvonline07
  - Scientific Linux 7
  - A2818 card
- VME Crate
  - V2718 card – vme slot 0 controller
  - CROCE card #1 (4 ports)
    - port 1 – 10 front end boards
    - port 2 – 5 front end boards
    - port 3 – 5 front end boards
  - CROCE card #2 (4 ports)
    - No FEBs
- System is powered
  - Operational readiness clearance passed – thanks Howard.
- Setup by Howard

Status

- Configuration and read out worked under SLF6 when Minerva was running
- SLF6 is obsolete at Fermilab, moving to SLF7
- Testing configuration and read out on SLF7
  - Configuration works
  - Working on read out next
- Howard working on light injection ORC
- Trying to get documentation in order
- Reviewing inventory
  - Collecting computers from underground (Steve Hahn)

Technical Notes

- Configurator
  - Source code
    - /work/mnvtb04/mnvconfigurator/v14_SlowControlE2CRC
    - export PYTHONPATH= /work/mnvtb04/mnvconfigurator/v14_SlowControlE2CRC
    - start with SC_MainApp.py
  - Configuration files
    - /work/mnvtb04/SlowControlConfigFiles/LabF-TestStand
    - v97_hvoff_1crate_4croces_10boardsonchain0_5boardsonchain1_5boardsonchain2_5boardsonchain3.hwcfg
- Run Control
  - /home/nfs/minerva/runcontrol.sh